DOCUMENT RESUME

ED 314 565 CE 053 155

AUTHOR Vassallo, Thomas
TITLE Commercial Art. COM-LINK. Competency Based Vocational Curricula with Basic Skills and Academic Linkages.
INSTITUTION Ocean County Vocational Technical School, Toms River, N.J.
SPONS AGENCY New Jersey State Dept. of Education, Trenton. Div. of Vocational Education.
PUB DATE Jul 89
NOTE 142p.; For related documents, see CE 053 146-174. Small, light type may not reproduce clearly.
PUB TYPE Guides - Classroom Use - Guides (For Teachers) (052)

EDRS PRICE MF01/PC06 Plus Postage.
DESCRIPTORS Academic Education; *Art Materials; Basic Skills; *Commercial Art; Communication Skills; *Competency Based Education; *Freehand Drawing; Graphic Arts; Integrated Curriculum; Mathematics Skills; Occupational Information; Science Instruction; Secondary Education; Vocational Education

ABSTRACT

This competency-based module uses the Ocean County (New Jersey) Vocational-Technical Schools curriculum-infused model for infusing basic skills instruction into vocational education. The model demonstrates the relationship of vocational skills to communication, mathematics, and science. The document begins with a philosophy statement; preface; a table that explains the number of hours required for academic credit in various programs and the number of those hours that are devoted to basic skills and vocational activities; matrices that show in which courses specific basic skills are taught; a list of objectives; and an explanation of student activities. The rest of the document consists of matrices that describe the relationship of vocational skills to basic skills within the commercial art program. These pages are organized by instructional unit and the topics within them. For each topic and associated task(s) are listed the theories and the communication, math, and science skills covered. Also listed are the expected student outcomes. The 19 units are: orientation; classroom safety; commercial art theory; basic drawing; tools; measurement; rough layout; layout and design; lettering; paste-up; inking; silkscreen; color; cartooning; airbrush; computer; photography; stat camera; and art careers. (KC)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED314565

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☑ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

CG015355

Competency Based Vocational Curricula

COM-LINK

With Basic Skills And Academic Linkages

Dr. Frederick Felice, Project Director

Marilyn Halprin, Co Project Director (Project Coordinator)

In Cooperation With The

New Jersey State Department of Education

Division of Vocational Education

And

Ocean County Vocational-Technical School

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

M Halprin

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

BEST COPY AVAILABLE

"It is the policy of the Ocean County Vocational-Technical School not to discriminate in its technical programs, activities, employment practices, or admission policies and practices on the basis of race, color, or national origin, sex or handicap. Lack of English language skills will not be a deterrent to admission to any program at the Ocean County Vocational-Technical School."

Ocean County Vocational-Technical School

Commercial Art

Prepared by

Thomas Vassallo, Instructor

Project Director
Frederick Felice, Ed. D., Assistant Superintendent

Project Coordinator and Editor
Marilyn Halprin, Supervisor of Basic Studies

Assistant Editor and Typist
Laura Vassallo

Administrative Offices
137 Bey Lea Road
Toms River, New Jersey 08753

William G. Henry, Superintendent

In cooperation with
the New Jersey Department of Education
Division of Vocational Education, Trenton, New Jersey 08625

PHILOSOPHY OF EDUCATION

The Ocean County Vocational-Technical Education Program should consist of those courses, activities and experiences which are designed to prepare students for a successful entrance in a given field of work. The program should be based upon an analysis of the worker needs of the field of work, the opportunities and requirements for entrance, and the particular characteristics and needs of the students.

We believe that:

The school should educate and train the students to live effectively in our ever-changing world.

The school should provide, for each student, intensive training toward general and specific job objectives, and setting standards of performance in keeping with the requirements of that particular field of work.

All students should evidence the interest, aptitude, and ability to profit from the specialized instruction, and this should be a condition of entrance into or continuance in a given field of work.

Equal attention should be given in the school program to develop sound character, good citizenship, ability to think critically, and maintain good mental and physical health.

The school must be constantly striving to fulfill its ultimate purpose; that of serving the students and the community. The school should give careful consideration to the needs, interests, and capacities of the students and the educational and technical background, experience, training, and professional interest of the professional staff as they develop a working philosophy of education.

PREFACE

The curriculum format employed by this project is competency based and utilizes the Ocean County Vocational-Technical Schools' curriculum infused model for the teaching of basic skills as part of vocational education. The design demonstrates the relationship of vocationally related skills to communication, mathematics and science knowledge. Proficiences with regard to student outcomes cannot be achieved without mastery in related academic areas. All student outcome objectives are predicated upon entry level skills which reflect the dictates of the job marketplace and industry. In addition, basic skills matrices developed by the district are included. The totality of this package is designed to facilitate the vocational teaching process and to enchance the learning experiences of our students.

POTENTIAL OPPORTUNITY FOR AWARDING ACADEMIC CREDITS FOR STUDENTS AT OCEAN COUNTY VOCATIONAL-TECHNICAL SCHOOL

450 hours - 1 year course at O.C.V.T.S.
900 hours - 2 year course at O.C.V.T.S.
1000 hours - 2 year Beauty Culture course

120 hours per year needed for 5 credits
60 hours per year needed for 2½ credits

COURSE	TOTAL HOURS	HOURS SPENT ON COMMUNICATION SKILLS	HOURS SPENT ON COMPUTATION SKILLS	HOURS SPENT ON SCIENCE	TIME ON OCCUPATIONAL ACTIVITIES IN CLASS OR SHOP
AIR CONDITIONING, REFRIGERATION AND HEATING	900	140	120	120	520
AUTO BODY REPAIR	900	130	120	125	525
AUTOMOTIVE MECHANICS	900	150	120	120	510
AUTOMOTIVE AND DIESEL ENGINE REBUILDING	900	216	126	125	433
BEAUTY CULTURE I AND II	1000	240	120	130	515
BUILDING TRADES	900	135	120	130	515
BUSINESS RELATIONS - MEDIA/MODELING	450	200	60	40	150
CHILD CARE AIDE	900	240	120	122	418
COMMERCIAL ART AND PRINTING	900	120	215	75	580
COMMERCIAL BUILDING CONSTRUCTION (MASONRY)	900	130	125	130	515

POTENTIAL OPPORTUNITY FOR AWARDING ACADEMIC CREDITS FOR STUDENTS AT OCEAN COUNTY VOCATIONAL-TECHNICAL SCHOOL

450 hours - 1 year course at O.C.V.T.S.
900 hours - 2 year course at O.C.V.T.S.
1000 hours - 2 year Beauty Culture course

120 hours per year needed for 5 credits
60 hours per year needed for 2½ credits

COURSE	TOTAL HOURS	HOURS SPENT ON COMMUNICATION SKILLS	HOURS SPENT ON COMPUTATION SKILLS	HOURS SPENT ON SCIENCE	TIME ON OCCUPATIONAL ACTIVITIES IN CLASS OR SHOP
COMMERCIAL PHOTOGRAPHY & TELEVISION PRODUCTION	900	150	125	80	545
CUSTOM CABINETMAKING	900	130	120	60	590
DENTAL ASSISTING	450	168	65	77	140
DESIGN DRAFTING	900	135	150	165	450
ELECTRICAL TRADES	900	106	120	124	550
FASHION MERCHANDISING	450	200	60	40	150
FOOD SERVICES	900	206	132	125	437
INDUSTRIAL AUTOMATION AND ELECTRONICS	900	129	140	132	499
INTERIOR DESIGN	900	210	130	120	440
LANDSCAPING AND GREENHOUSE TECHNOLOGY	900	125	125	175	475

POTENTIAL OPPORTUNITY FOR AWARDING ACADEMIC CREDITS FOR STUDENTS AT OCEAN COUNTY VOCATIONAL-TECHNICAL SCHOOL

450 hours - 1 year course at O.C.V.T.S.
900 hours - 2 year course at O.C.V.T.S.
1000 hours - 2 year Beauty Culture course

120 hours per year needed for 5 credits
60 hours per year needed for 2½ credits

COURSE	TOTAL HOURS	HOURS SPENT ON COMMUNICATION SKILLS	HOURS SPENT ON COMPUTATION SKILLS	HOURS SPENT ON SCIENCE	TIME ON OCCUPATIONAL ACTIVITIES IN CLASS OR SHOP
MARINE ENGINE AND BOAT SERVICES	900	164	120	125	491
MEDICAL OFFICE RECEPTIONIST/ASSISTANT	450	173	60	77	140
MEDICAL SKILLS AND RELATED HEALTH CAREERS	450	135	65	125	125
MEDICAL SKILLS (ADVANCED)	450	125	60	125	140
PLUMBING AND HEATING	900	140	120	120	520
RECREATIONAL VEHICLE MAINTENANCE AND REPAIR	900	125	130	60	585
T.V. AND COMPUTER REPAIR	900	125	150	175	450
WELDING	900	135	120	100	545

COMMUNICATION SKILLS

Listed below are all courses offered at the Ocean County Vocational-Technical School.
The asterisk indicates that the topic is studied in that curriculum.

COURSE	Functional Reading Skills	Vocabulary	Identifying Main Ideas	Meanings in Context	Inferences	Fact/Opinion Distinction	Signal Words	Parts of Text-book/Manual	Following Directions	Outlining and Note Taking	Interpretation of Maps, Graphs and Charts	Interpretation of Diagrams	Test Taking Skills	Expository Writing Skills	Problem Solving	Spelling	Oral Communications	Study Skills	Resume Writing	Job Application Skills
AIR CONDITIONING, REFRIGERATION AND HEATING	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
AUTO BODY REPAIR	*	*		*	*	*	*		*	*	*	*	*	*	*	*	*	*	*	*
AUTOMOTIVE MECHANICS	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
AUTOMOTIVE AND DIESEL ENGINE REBUILDING	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
BEAUTY CULTURE I AND II	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
BUILDING TRADES	*	*		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
BUSINESS RELATIONS - MEDIA/MODELING/TRAVEL	*	*	*	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*
CHILD CARE AIDE	*	*	*	*	*	*	*		*	*	*	*	*	*	*	*	*	*	*	*
COMMERCIAL ART AND PRINTING CAREERS	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
COMMERCIAL BUILDING CONSTRUCTION (MASONRY)	*	*	*		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
COMMERCIAL PHOTOGRAPHY AND TELEVISION PRODUCTION	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
CUSTOM CABINETMAKING	*	*		*	*	*	*		*	*	*	*	*	*	*	*	*	*	*	*
DENTAL ASSISTING	*	*	*	*	*	*	*		*	*	*	*	*	*	*	*	*	*	*	*

COMMUNICATION SKILLS - CONTINUED

COURSE	Functional Reading Skills	Vocabulary	Identifying Main Ideas	Meanings in Context	Inferences	Fact/Opinion Distinction	Signal Words	Parts of Text-book/Manual	Following Directions -	Outlining and Note Taking	Interpretation of Maps, Graphs and Charts	Interpretation of Diagrams	Test Taking Skills	Expository Writing Skills	Problem Solving	Spelling	Oral Communications	Study Skills	Resume Writing	Job Application Skills
DESIGN DRAFTING	*	*	*		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
ELECTRICAL TRADES	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
FASHION MERCHANDISING	*	*	*	*	*	*	*		*	*	*	*	*	*	*	*	*	*	*	*
FOOD SERVICES	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
INDUSTRIAL AUTOMATION AND ELECTRONICS	*	*	*		*	*			*	*	*	*	*	*	*	*	*	*	*	*
INTERIOR DESIGN	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
LANDSCAPING AND GREENHOUSE TECHNOLOGY	*	*	*	*	*	*	*		*	*	*	*	*	*	*	*	*	*	*	*
MARINE ENGINE AND BOAT SERVICE	*	*	*		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
MEDICAL OFFICE RECEPTIONIST/ASSISTANT	*	*	*	*	*	*	*		*	*	*	*	*	*	*	*	*	*	*	*
MEDICAL SKILLS AND RELATED HEALTH CAREERS	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
MEDICAL SKILLS (ADVANCED)	*	*	*	*	*	*	*		*	*	*	*	*	*	*	*	*	*	*	*
PLUMBING AND HEATING	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
RECREATIONAL VEHICLE MAINTENANCE AND REPAIR	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
T.V. AND COMPUTER REPAIR	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
WELDING	*	*	*			*	*	*	*	*	*	*	*	*	*	*	*	*	*	*

MATHEMATICS SKILLS

Listed below are all courses offered at the Ocean County Vocational-Technical School. The asterisk indicates that the topic is studied in that curriculum.

COURSE	Whole Numbers	Common Fractions	Decimals	Percentages	Weights and Measurements	Ratio and Proportion	Powers and Roots	Formulas	Estimating	Geometry	Basic Trigonometric Functions	Graphs
AIR CONDITIONING, REFRIGERATION AND HEATING	*	*	*	*	*	*	*	*	*	*	*	*
AUTO BODY REPAIR	*	*	*	*	*	*	*	*	*	*		*
AUTOMOTIVE MECHANICS	*	*	*	*	*	*	*	*	*			*
AUTOMOTIVE AND DIESEL ENGINE REBUILDING	*	*	*	*	*	*	*	*	*	*		*
BEAUTY CULTURE I AND II	*	*	*	*	*	*	*	*	*	*	*	*
BUILDING TRADES	*	*	*	*	*	*	*	*	*	*	*	*
BUSINESS RELATIONS - MEDIA/MODELING/TRAVEL	*		*	*		*			*			*
CHILD CARE AIDE	*	*	*	*	*	*		*	*	*	*	*
COMMERCIAL ART AND PRINTING CAREERS	*	*	*	*	*	*		*	*	*		*
COMMERCIAL BUILDING CONSTRUCTION (MASONRY)	*	*	*	*	*	*	*	*	*	*	*	*
COMMERCIAL PHOTOGRAPHY AND TELEVISION PRODUCTION	*	*	*	*	*	*	*	*	*	*	*	*
CUSTOM CABINETMAKING	*	*	*	*	*	*	*	*	*	*	*	*
DENTAL ASSISTING	*	*	*	*	*	*		*	*			*

MATHEMATICS SKILLS - CONTINUED

COURSE	Whole Numbers	Common Fractions	Decimals	Percentages	Weights and Measurements	Ratio and Proportion	Powers and Roots	Formulas	Estimating	Geometry	Basic Trigonometric Functions	Graphs
DESIGN DRAFTING	*	*	*	*	*	*		*	*	*	*	*
ELECTRICAL TRADES	*	*	*	*	*	*	*	*	*	*	*	*
FASHION MERCHANDISING	*	*	*	*	*	*		*	*	*		*
FOOD SERVICES	*	*	*	*	*	*		*	*	*		*
INDUSTRIAL AUTOMATION AND ELECTRONICS	*	*	*	*	*	*		*	*	*	*	*
INTERIOR DESIGN	*	*	*	*	*	*		*	*	*		*
LANDSCAPING AND GREENHOUSE TECHNOLOGY	*	*	*	*	*	*		*	*	*	*	*
MARINE ENGINE AND BOAT SERVICE	*	*	*	*	*	*		*			*	*
MEDICAL OFFICE RECEPTIONIST/ASSISTANT	*	*	*	*	*	*	*	*	*	*		*
MEDICAL SKILLS AND RELATED HEALTH CAREERS	*	*	*	*	*	*		*	*	*	*	*
MEDICAL SKILLS (ADVANCED)	*	*	*	*	*	*		*	*	*	*	*
PLUMBING AND HEATING	*	*	*	*	*	*	*	*	*	*	*	*
RECREATIONAL VEHICLE MAINTENANCE AND REPAIR	*	*	*	*	*	*	*	*			*	*
T.V. AND COMPUTER REPAIR	*	*	*	*	*	*	*	*		*	*	*
WELDING	*	*	*	*	*	*		*	*	*	*	*

SCIENCE SKILLS

Listed below are all courses offered at the Ocean County Vocational-Technical School. Those listed as "Not Available" do not offer enough hours to qualify for credits in your high school. However, we have noted the skills covered. Those listed with an asterisk after the title are eligible. The asterisk indicates that the topic is studied in that curriculum.

	HUMAN ANATOMY						ASTRONOMY			CHEMISTRY			PHYSICS					ECOLOGY				
COURSE	Cellular Theory	Skeletal System	Muscles	System of Body	Diseases	Psychology	Solar System	Gravity	Weather	Matter	Chemical Reactions	Applied Chemistry	Light	Magnetism	Heat	Magnetism and Electricity	Nuclear Energy	Botany	Food Production	Fuels	Nutrition	Waste Disposal
AIR CONDITIONING, REFRIGERATION AND HEATING							*	*	*	*	*	*		*	*	*				*	*	
AUTO BODY REPAIR								*	*	*	*	*	*	*	*					*		*
AUTOMOTIVE MECHANICS								*		*	*	*	*	*	*	*				*		
AUTOMOTIVE DIESEL AND ENGINE REBUILDING								*		*	*	*		*	*	*	*			*		*
BEAUTY CULTURE I AND II	*	*	*	*	*	*				*	*	*	*		*	*					*	
BUILDING TRADES							*	*	*	*	*	*	*		*	*		*		*		
BUSINESS RELATIONS - MEDIA/MODELING/TRAVEL	N	* O	* T	* A	V	* A	I	L	A	B	L	E										
CHILD CARE AIDE	*	*	*	*	*	*			*		*	*		*	*			*	*		*	*
COMMERCIAL ART AND PRINTING CAREERS	N	O	T	A	V	A	I	* L	A	* B	* L	* E	*		*	*						*
COMMERCIAL BUILDING CONSTRUCTION (MASONRY)	*	*	*	*	*	*		*	*	*	*	*	*	*	*	*		*		*	±	*
COMMERCIAL PHOTOGRAPHY AND TELEVISION PRODUCTION	N	O	T	A	V	* A	I	* L	A	* B	* L	* E	*		*	*						*
CUSTOM CABINETMAKING	* N	O	T	A	V	A	I	* L	A	* B	* L	* E			*			*				
DENTAL ASSISTING	*	*	*	*	*	*				*	*	*	*								*	*

SCIENCE SKILLS - CONTINUED

COURSE	HUMAN ANATOMY						ASTRONOMY			CHEMISTRY			PHYSICS					ECOLOGY				
	Cellular Theory	Skeletal System	Muscles	System of Body	Diseases	Psychology	Solar System	Gravity	Weather	Matter	Chemical Reactions	Applied Chemistry	Light	Magnetism	Heat	Magnetism and Electricity	Nuclear Energy	Botany	Food Production	Fuels	Nutrition	Waste Disposal
DESIGN DRAFTING							*	*	*	*		*	*		*	*	*			*		*
ELECTRICAL TRADES							*	*	*	*	*		*	*	*	*	*		*			
FASHION MERCHANDISING	*	*	*	*		*		*		*	*	*	*								*	
FOOD SERVICES					*	*		*	*		*	*	*		*				*		*	*
INDUSTRIAL AUTOMATION AND ELECTRONICS								*		*			*	*	*	*	*			*		
INTERIOR DESIGN		*	*			*	*	*	*	*	*	*	*		*	*						
LANDSCAPING AND GREENHOUSE TECHNOLOGY							*	*	*		*	*	*		*	*		*	*	*	*	*
MARINE ENGINE AND BOAT SERVICE								*	*	*	*	*	*	*	*	*		*		*		
MEDICAL OFFICE RECEPTIONIST/ASSISTANT	N	* O	* T	* A	* V	* A	I	L	A	B	* L	E										*
MEDICAL SKILLS AND RELATED HEALTH CAREERS	*	*	*	*	*	*		*		*	*					*			*		*	*
MEDICAL SKILLS (ADVANCED)	*	*	*	*	*	*		*		*	*					*			*		*	*
PLUMBING AND HEATING					*		*	*	*	*	*	*			*	*		*		*		*
RECREATIONAL VEHICLE MAINTENANCE AND REPAIR	N	O	T	A	V	A	I	* L	A	* B	* L	* E	*	*	*	*				*		*
T.V. AND COMPUTER REPAIR										*	*	*	*	*	*	*				*		
WELDING								*		*	*	*	*	*	*	*				*		

COURSE OBJECTIVES

1. To prepare students with entry level skills, abilities and knowledge for employment in the commercial art trades.

2. To present 900 hours of instruction and practice in the commercial art trades in accordance with the course curriculum and skill profile outline.

3. To provide a detailed summary evaluation of the proficiency achieved by each student representing the most important content areas presented in the commercial art skill profile.

4. To help each student develop positive attitudes and ideals related to their occupation in the commercial art trades and understand their own capabilities and potential.

5. To instill in each student the need to plan for their professional growth through continuous learning in their chosen occupation.

STUDENT ACTIVITIES

All students enrolled in the Ocean County Vocational-Technical School are encouraged to join Vocational Industrial Clubs of America (VICA). Student activities are infused into each program. Each building has a student government and a student activities program separate from VICA. Additionally, students from each center and every class are encouraged to participated in the VICA Leadership and Job Demonstration Contests which begin in the centers and radiate throughout the district as Ocean County Vocational-Technical School inter school winners are chosen.

Student activities emphasize the basic precepts of VICA, as well as the basic tenets of democracy. Within the context, each of our programs teaches the dignity of work, high standards in trade ethics and safety, and a belief in the free enterprise economic system.

TABLE OF CONTENTS

COMMERCIAL ART

PHILOSOPHY OF EDUCATION..... i

PREFACE..... ii

POTENTIAL OPPORTUNITY FOR AWARDING ACADEMIC CREDITS..... iii

COMMUNICATION SKILLS..... vi

MATHEMATICS SKILLS..... viii

SCIENCE SKILLS..... x

COURSE OBJECTIVES..... xii

STUDENT ACTIVITIES..... xiii

ORIENTATION..... 1

CLASSROOM SAFETY..... 3

COMMERCIAL ART THEORY..... 4

BASIC DRAWING..... 5
- Drafting Tools..... 5
- Representational Drawings..... 6
- Perspective Drawing..... 7

TOOLS..... 8

MEASUREMENT..... 9
- Standard Measurement..... 9
- Printer's Measurement..... 10

ROUGH LAYOUT..... 11
- Symbols of the Trade..... 11
- Producing Roughs..... 12
- Comprehensives..... 13

LAYOUT AND DESIGN..... 14
- Design Principles..... 14
- Logos..... 15
- Ad Mechanicals..... 16
- Enlargements and Reductions..... 17
- Character Counts..... 18
- Typestyles..... 19

- Clip Art..... 20
- Kroy Headliner..... 21

LETTERING..... 22
- Vertical Gothic Lettering..... 22
- Speedball Lettering System..... 23
- Built-Up Lettering..... 24
- Marker Lettering..... 25
- Dry Transfer..... 26
- Brush Lettering..... 27
- Mechanical Lettering..... 28

PASTE-UP..... 29
- Symbols of the Trade..... 29
- Paste-Up Theory..... 30
- Wax and Rubber Cement Paste-Ups..... 31

INKING..... 32

SILKSCREEN..... 33
- Hand Cut Stencils..... 33
- Indirect Photostencils..... 34
- Direct Photostencils..... 35
- Inks and Solvents..... 36
- Fabrics..... 37
- Stretching Fabrics..... 38
- Squeegees..... 39
- Printing..... 40

COLOR..... 41

CARTOONING..... 42
- Faces and Figures..... 42
- Panels..... 43

AIRBRUSH..... 44
- Maintenance..... 44
- Airbrush Techniques..... 45

TABLE OF CONTENTS - CONTINUED
COMMERCIAL ART

COMPUTER..... 46
PC Based Publishing..... 46
Page Design Software..... 47
Graphics Software..... 48
PHOTOGRAPHY..... 49
35mm Single Lens Reflex Camera..... 49
Roll Film..... 50
Contact Printing..... 51
Projection Printing..... 52
Photograph Mounting..... 53
Slide Graphics..... 54
STAT CAMERA..... 55
ART CAREERS..... 56

UNIT: ORIENTATION

TOPIC:

Task	Theory	Communication Skills	Mathematics Skills	Science Knowledge	Student Outcome
I. School rules and regulations	A. Student rights and responsibilities B. Student grievance procedures C. Student expectations D. School code of discipline E. Attendance and graduation policy F. Student transfers G. Grading system H. Accidents I. Bedside instruction J. Cooperative Industrial Education (C.I.E.) K. Driving policy L. Drug and alcohol policy M. Early dismissal procedures N. Lockers O. Driver permits P. School closing procedures Q. Smoking R. Student progress reports S. Telephones T. Theft U. Tools and equipment V. Vocational Industrial Clubs of America (VICA)	A. Note taking B. Filling out forms C. Oral communication D. Test taking skills E. Functional reading skills (Student Handbook)			A. The student will know what is expected of him/her for the school year in order to promote effective learning conditions Written test B. The student will know the standards to be met within the school and classroom Written test

UNIT: ORIENTATION - CONTINUED

TOPIC:

Task	Theory	Communication Skills	Mathematics Skills	Science Knowledge	Student Outcome
II. Student contract	A. Attendance B. Request for make-up work C. Extra help with assignments or lessons D. Homework assignments E. Notebooks F. Passing test grade G. Daily grading system H. Lockers I. Dress Code J. Daily cleaning duties	A. Functional reading skills B. Following directions C. Outlining and note taking D. Oral communications			A. The student will know what is expected of him/her for the school year in order to promote effective learning conditions Written test B. The student will know the standards to be met within the school and classroom Written test

UNIT: CLASSROOM SAFETY

TOPIC:

Task	Theory	Communication Skills	Mathematics Skills	Science Knowledge	Student Outcome
I. Utilizing tools and solvents	A. X-acto knife and razor safety B. Solvent and chemical handling 1. Right-to-Know Law a. absorption b. ingestion c. inhalation d. eye safety 2. Safe handling procedures C. Carcinogens D. Spray adhesives E. Fixatives F. Rubber cement G. Photo-chemicals	A. Deductive reasoning - written exam B. Vocabulary - identification of solvents C. Spelling - identification of solvents D. Functional reading skills 1. Label and precautions 2. Safety handouts 3. Chemical mixing procedures E. Inferences F. Test taking skills G. Oral communications H. Signal words I. Outlining and note taking J. Following directions	A. Ratio and proportion - mixing photochemicals B. Weights and measurements 1. Liquid 2. Dry	A. Acids 1. Definition 2. Safe handling procedures B. Absorption 1. Definition 2. Protective procedures C. Ingestion 1. Definition 2. Protective procedures D. Inhalation 1. Definition 2. Protective procedures E. Protective devices 1. Rubber gloves 2. Goggles F. Liquid measurement 1. Ounces 2. Pints 3. Quarts 4. Gallons G. Dry measurement 1. Ounces 2. Pounds	A. The student will be able to demonstrate safe handling procedures of solvents B. The student will be able to demonstrate safe handling procedures of x-acto knives and razors C. The student will be able to demonstrate a knowledge of safe chemical and solvent handling procedures upon written examination D. The student will be able to safely mix photo-chemicals E. The student will be able to identify potentially hazardous chemicals and solvents by reading label precautions

UNIT: COMMERCIAL ART THEORY

TOPIC:

Task	Theory	Communication Skills	Mathematics Skills	Science Knowledge	Student Outcome
	Commercial art 1. Fine art 2. Illustration 3. Commercial art 4. Printing processes	A. Functional reading skills - informational handouts B. Vocabulary 1. Commercial art fields 2. Printing processes 3. Layout glossary C. Identifying main ideas 1. Relationship of commercial art fields 2. Relationship of art to printing D. Outlining and note taking E. Spelling - layout terms F. Writing skills		A. Applied chemistry 1. Chemical relationships in photo-offset theory 2. Chemical relationships in gravure process 3. Inks B. Vocabulary 1. Relief 2. Planographic 3. Reverse images to right reading print C. Photographic theory 1. Plates 2. Stencils	A. The student will be able to discuss the relationship of the fields within commercial art upon written examination B. The student will be able to demonstrate a knowledge of photo-offset theory upon written examination C. The student will be able to list the four basic printing processes upon written examination D. The student will be able to demonstrate a knowledge of printing processes upon written examination

UNIT: BASIC DRAWING

TOPIC: DRAFTING TOOLS

Task	Theory	Communication Skills	Mathematics Skills	Science Knowledge	Student Outcome
I. Proper utilization of drafting tools	A. Drafting tools 1. Identification 2. Utilization B. Commercial art papers 1. Identification 2. Utilization	A. Functional reading skills 1. Informational handouts 2. Labels 3. Containers B. Vocabulary 1. Tool identification 2. Paper identification C. Outlining and note taking D. Spelling 1. Tools 2. Papers E. Test taking skills	A. Geometry 1. Angles of triangles 2. Horizontal lines 3. Vertical lines 4. Parallel lines 5. Diagonal lines 6. Geometric forms B. Measurement - use of standard measurement scales	Applied chemistry 1. Chemical relationship of materials (erasers to materials) 2. Papers a. absorbency b. rigidity c. finish	A. The student will be able to identify five tools upon written examination B. The student will be able to identify five papers upon written examination C. The student will be able to demonstrate proper care of tools D. The student will be able to utilize proper tools for the task E. The student will be able to identify angles and draw diagonal lines F. The student will be able to draw horizontal parallel lines G. The student will be able to draw vertical parallel lines H. The student will be able to utilize standard measurement scales I. The student will be able to select proper paper for the task

UNIT: BASIC DRAWING - CONTINUED

TOPIC: REPRESENTATIONAL DRAWINGS

Task	Theory	Communication Skills	Mathematics Skills	Science Knowledge	Student Outcome
I. **Production of representational drawings**	A. Pencils B. Papers C. Illustration aids D. Tracing and transfer	A. Functional reading skills 1. Informational handouts 2. Labels B. Vocabulary 1. Tool identification 2. Paper identification C. Outlining and note taking D. Spelling - illustration aids E. Test taking skills	Ratio and proportion 1. Enlargement 2. Reduction	Applied chemistry 1. Chemical make up of pencils 2. Erasers	A. The student will be able to identify grades of pencils B. The student will be able to demonstrate a knowledge of chemical make up of pencils upon written examination C. The student will be able to identify four types of illustration aids upon written examination D. The student will be able to utilize illustration aids E. The student will be able to utilize tracing and transfer procedures F. The student will be able to identify types of paper

UNIT: BASIC DRAWING - CONTINUED

TOPIC: PERSPECTIVE DRAWING

Task	Theory	Communication Skills	Mathematics Skills	Science Knowledge	Student Outcome
I. Production of perspective drawings	A. Perspective drawing 1. One-point 2. Two-point B. Isometric drawing C. Oblique drawing	A. Functional reading skills - informational handouts B. Vocabulary C. Outlining and note taking D. Interpretation of diagrams 1. One-point perspective 2. Two-point perspective 3. Isometric drawings 4. Oblique drawings E. Following directions - utilization of performance test handout F. Spelling - related terminology G. Test taking skills	A. Geometry 1. Points 2. Lines 3. Convergent lines 4. Parallel lines 5. Angles - degrees 6. Diagonal lines 7. Perpendicular lines B. Measurement - standard measurement scales		A. The student will be able to produce a one-point perspective drawing B. The student will be able to produce a two-point perspective drawing C. The student will be able to produce an isometric drawing D. The student will be able to produce an oblique drawing E. The student will be able to identify and select grades of pencils for the task F. The student will be able to identify and select tools for the task G. The student will be able to identify and select papers for the task H. The student will be able to demonstrate a knowledge of perspective, isometric and oblique drawings upon written examination

UNIT: TOOLS

TOPIC:

Task	Theory	Communication Skills	Mathematics Skills	Science Knowledge	Student Outcome
I. Identification of tools II. Utilization of inking tools	A. Commercial art tools 1. Identification 2. Utilization B. Inking tools 1. Identification 2. Utilization C. India ink	A. Functional reading skills 1. Informational handouts 2. Labels 3. Containers B. Vocabulary - tool names and identification C. Spelling D. Outlining and note taking E. Following directions F. Test taking skills	Geometry 1. Angles 2. Degrees	Applied chemistry 1. Chemical relationship of materials a. erasers b. rubber cement 2. Characteristics of india ink	A. The student will be able to identify five commercial art tools upon written examination B. The student will be able to identify three inking tools upon written examination C. The student will be able to utilize proper tool for the task D. The student will be able to produce an inking assignment on bristol

UNIT: MEASUREMENT

TOPIC: STANDARD MEASUREMENT

Task	Theory	Communication Skills	Mathematics Skills	Science Knowledge	Student Outcome
I. Demonstration of usage of standard measurement	A. Reading the ruler B. Utilizing the ruler C. Reducing fractions	A. Functional reading skills 1. Informational handouts 2. Worksheets B. Following directions C. Interpretation of diagrams D. Outlining and note taking E. Vocabulary 1. Numerators 2. Denominators F. Test taking skills	A. Whole numbers 1. Inch divisions 2. Addition 3. Subtraction 4. Multiplication 5. Division B. Common fractions 1. Fractional divisions 2. Numerators 3. Denominators 4. Addition 5. Subtraction 6. Multiplication 7. Division 8. Compound 9. Reduction 10. Improper C. Measurement - utilization of standard scale D. Decimals 1. Convert decimals to fractions 2. Convert fractions to decimals 3. Add decimals 4. Subtract decimals		A. The student will be able to utilize standard measurement scales to draw guidelines B. The student will be able to measure accurately to within 1/16 inch C. The student will be able to reduce fractions to the lowest form D. The student will be able to divide compound fractions E. The student will be able to reduce fractions upon written examination

UNIT: MEASUREMENT - CONTINUED

TOPIC: PRINTER'S MEASUREMENT

Task	Theory	Communication Skills	Mathematics Skills	Science Knowledge	Student Outcome
I. Utilization of point and pica measurement scales	A. Type measurement 1. Points 2. Picas 3. Leads B. Em measurement 1. Em 2. Units C. Inch conversions 1. Points to picas 2. Picas in inch 3. Points in inch	A. Functional reading skills - informational handouts B. Vocabulary 1. Point 2. Pica 3. Em 4. Lead 5. Type C. Following directions D. Interpretation of diagrams E. Outlining and note taking F. Test taking skills	A. Whole numbers 1. Addition 2. Subtraction 3. Multiplication 4. Division B. Measurement - utilization of printer's measurement 1. Points 2. Picas 3. Ems C. Fractions 1. Addition 2. Subtraction 3. Multiplication 4. Division		A. The student will be able to utilize point and pica measurement scales to draw guidelines B. The student will be able to utilize point measurement to measure type accurately within one point C. The student will be able to convert standard measurement to printer's measurement D. The student will be able to convert printer's measurement to standard measurement E. The student will be able to demonstrate a knowledge of points and picas upon written examination

UNIT: ROUGH LAYOUT

TOPIC: SYMBOLS OF THE TRADE

Task	Theory	Communication Skills	Mathematics Skills	Science Knowledge	Student Outcome
I. Utilization of symbols of the trade	A. Rough layout symbols 1. Body copy 2. Subheads 3. Display type 4. Illustration 5. Photographs B. Terminology 1. Surprint 2. Reverse print 3. Dropout 4. Halftone 5. Logo 6. Body copy 7. Subhead 8. Display type C. Measurement 1. Standard 2. Printer's	A. Functional reading skills - informational handouts B. Vocabulary - printing terminology C. Following directions - rough layout performance tests D. Interpretation of diagrams - rough layout symbols E. Outlining and note taking F. Spelling - terminology G. Test taking skills	Measurement 1. Utilize standard measurement scales 2. Utilize printer's measurement		A. The student will be able to produce rough Layouts utilizing proper symbols of the trade B. The student will be able to demonstrate a knowledge of rough Layout symbols upon written examination C. The student will be able to identify papers

UNIT: ROUGH LAYOUT - CONTINUED

TOPIC: PRODUCING ROUGHS

Task	Theory	Communication Skills	Mathematics Skills	Science Knowledge	Student Outcome
I. Producing pencil roughs II. Producing marker roughs	A. Pencil roughs 1. Pencils a. grades b. chemical make up c. crosshatching 2. Rough layout symbols 3. Measurement 4. Use of drafting tools 5. Type measurement B. Marker roughs 1. Felt tip pens 2. Color separation a. vocabulary b. theory 3. Color psychology 4. Color matching systems	A. Functional reading skills 1. Informational handouts 2. Performance test directions B. Vocabulary 1. Printing terminology 2. Color separation C. Following directions 1. Rough layout performance test 2. Marker rough performance test D. Interpretation of diagrams - rough layout symbols E. Spelling 1. Art copy 2. Printing terminology 3. Color separation terminology F. Test taking skills	A. Measurement 1. Utilize standard measurement scale 2. Utilize printer's measurement B. Geometry - identify geometric forms	Applied chemistry 1. Graphite 2. Friction 3. Tonal scale 4. Marker permanency a. water base b. alcohol base	A. The student will be able to produce rough layouts utilizing several grades of pencil B. The student will be able to produce rough layouts utilizing markers C. The student will be able to utilize standard measurement scales D. The student will be able to utilize printer's measurement E. The student will be able to demonstrate a knowledge of color separation theory and vocabulary upon written examination F. The student will be able to identify papers G. The student will be able to identify marker types

UNIT: ROUGH LAYOUT - CONTINUED

TOPIC: COMPREHENSIVES

Task	Theory	Communication Skills	Mathematics Skills	Science Knowledge	Student Outcome
I. Producing comprehensives	A. Steps to a layout 1. Thumbnails 2. Rough layout 3. Comprehensive layout 4. Mechanical B. Message analysis C. Color matching systems	A. Functional reading skills 1. Informational handouts 2. Performance test directions B. Vocabulary - steps to a layout C. Following directions - performance test D. Spelling - layout terms E. Test taking skills	A. Measurement 1. Utilize standard measurement scales 2. Utilize printer's measurement B. Geometry	Applied chemistry 1. Art mediums 2. Fixatives	A. The student will be able to produce color comprehensives B. The student will be able to demonstrate a knowledge of color matching systems and art mediums upon written examination C. The student will be able to identify papers D. The student will be able to identify art mediums E. The student will be able to list the steps to a layout upon written examination

UNIT: LAYOUT AND DESIGN

TOPIC: DESIGN PRINCIPLES

Task	Theory	Communication Skills	Mathematics Skills	Science Knowledge	Student Outcome
I. Utilizing design principles	A. Balance 1. Formal 2. Informal B. Contrast C. Rhythm D. Unity E. Harmony F. Proportion	A. Functional reading skills - informational handouts B. Vocabulary - design principles C. Spelling - design principles D. Inferences - principles related to advertisements E. Interpretation of diagrams - principles related to advertisements F. Outlining and note taking G. Oral communications 1. Critique 2. Oral quiz H. Test taking skills			A. The student will be able to list the design principles upon written examination B. The student will be able to discuss the relationship of design principles to the layout of an advertisement C. The student will be able to identify the use of design principles in advertisements during an oral quiz D. The student will be able to utilize design principles to improve layout skills

UNIT: LAYOUT AND DESIGN - CONTINUED

TOPIC: LOGOS

Task	Theory	Communication Skills	Mathematics Skills	Science Knowledge	Student Outcome
I. Producing logos	A. Basic shapes of 2-D design B. Use of symbols C. Corporate identity	A. Functional reading skills 1. Informational handouts 2. Performance test B. Vocabulary - logo C. Spelling D. Inferences 1. Message analysis 2. Relate symbols to corporation E. Outlining and note taking F. Identifying main ideas - relate symbol to corporation G. Test taking skills	A. Geometry 1. Identify geometric shapes 2. Utilize geometric shapes to construct logo designs B. Measurement - utilization of standard measurement scales		A. The student will be able to produce a logo on illustration board B. The student will be able to utilize geometric shapes to construct logo designs C. The student will be able to list four basic shapes of 2-D design upon written examination D. The student will be able to demonstrate a knowledge of logos and symbols upon written examination

UNIT: LAYOUT AND DESIGN - CONTINUED

TOPIC: AD MECHANICALS

Task	Theory	Communication Skills	Mathematics Skills	Science Knowledge	Student Outcome
I. Producing ad mechanicals	A. Thumbnail sketches B. Rough layout C. Image generation 1. Hot composition 2. Cold composition	A. Functional reading skills 1. Informational handouts 2. Performance test B. Vocabulary - image generation C. Spelling D. Inferences - message analysis E. Outlining and note taking F. Identifying main ideas - isolating pertinent information G. Following directions	A. Measurement 1. Utilize standard measurement scales 2. Utilize printer's measurement B. Geometry - identifies geometric forms	Applied chemistry 1. Molten metal and type 2. Photo theory 3. Strike-on images	A. The student will be able to produce an ad mechanical on illustration board B. The student will be able to demonstrate a knowledge of image generation upon written examination C. The student will be able to list three cold composition methods upon written examination

UNIT: LAYOUT AND DESIGN - CONTINUED

TOPIC: ENLARGEMENTS AND REDUCTIONS

Task	Theory	Communication Skills	Mathematics Skills	Science Knowledge	Student Outcome
I. Utilizing proportional scale II. Utilizing diagonal line scaling	A. Proportional scale 1. Enlargements 2. Reductions 3. Percentages 4. Times of reductions B. Diagonal line scaling 1. Proportion 2. Diagonal line scaling procedure a. enlargements b. reductions 3. Specifying percentages - proportional scale	A. Functional reading skills 1. Informational handouts 2. Worksheets 3. Directions 4. Performance test B. Vocabulary - proportional scale C. Outlining and note taking D. Following directions - utilization of proportional scale E. Problem solving F. Interpretation of diagrams - diagonal line scaling procedure G. Test taking skills	A. Whole numbers B. Common fractions C. Percentages D. Ratio and proportion E. Measurement F. Estimating G. Geometry 1. Geometric shapes 2. Diagonal lines 3. Perpendicular lines		A. The student will be able to utilize proportional scale to compute enlargements and reductions B. The student will be able to demonstrate a knowledge of proportional scales upon written examination C. The student will be able to utilize diagonal line scaling to compute enlargements and reductions D. The student will be able to demonstrate a knowledge of diagonal line procedure on a performance test

UNIT: LAYOUT AND DESIGN - CONTINUED

TOPIC: CHARACTER COUNTS

Task	Theory	Communication Skills	Mathematics Skills	Science Knowledge	Student Outcome
I. Performing character counts	A. Character counts B. Copyfitting procedure 1. Printing measurement 2. Formulas a. characters per line b. vertical space per line 3. Layout area computation	A. Functional reading skills - worksheet B. Vocabulary - copyfitting terminology C. Spelling - copyfitting terminology D. Problem solving E. Outlining and note taking F. Test taking skills	A. Whole numbers 1. Addition 2. Multiplication 3. Division B. Common fractions 1. Addition 2. Multiplication 3. Division C. Decimals - conversion to fractions D. Measurement 1. Use of standard measurement 2. Use of printer's measurement 3. Conversions E. Formulas 1. Characters per line 2. Vertical space per line F. Estimating		A. The student will be able to perform actual character counts B. The student will be able to compute layout area of copy C. The student will be able to demonstrate a knowledge of copyfitting procedures upon written examination

UNIT: LAYOUT AND DESIGN - CONTINUED

TOPIC: TYPESTYLES

Task	Theory	Communication Skills	Mathematics Skills	Science Knowledge	Student Outcome
I. Identifying typestyles	A. Type classifications 1. Serif 2. Sans serif 3. Type families B. Specifying type 1. Type notations 2. Position of words	A. Functional reading skills - informational handouts B. Vocabulary - type terminology C. Spelling -type terminology D. Interpretation of diagrams - structuring type notations E. Outlining and note taking F. Test taking skills	Measurement - printer's measurement		A. The student will be able to identify serif and sans serif typestyles B. The student will be able to measure line lengths in picas C. The student will be able to identify position of words D. The student will be able to demonstrate a knowledge of typestyles upon written examination E. The student will be able to identify segments of type notations upon written examination

UNIT: LAYOUT AND DESIGN - CONTINUED

TOPIC: CLIP ART

Task	Theory	Communication Skills	Mathematics Skills	Science Knowledge	Student Outcome
I. Utilizing clip art	A. Cold composition method of image generation B. Layout terminology	A. Interpretation of diagrams - message analysis for illustration selection B. Vocabulary - image generation C. Spelling - layout terminology	Ratio and proportion 1. Compute enlargements 2. Compute reductions		A. The student will be able to select clip art to coincide with message analysis of advertisement or layout B. The student will be able to identify clip art as a cold composition method upon written examination

UNIT: LAYOUT AND DESIGN - CONTINUED

TOPIC: KROY HEADLINER

Task	Theory	Communication Skills	Mathematics Skills	Science Knowledge	Student Outcome
I. Operating Kroy Headliners	A. Cold composition methods - strike-on B. Operation of machine 1. Disc selection and application 2. Printing	A. Functional reading skills - selection of typedisc B. Vocabulary - typestyles of discs C. Spelling - printing operation D. Interpretation of diagrams - symbols on control knobs		Applied chemistry 1. Tape base 2. Image material 3. Fixative	The student will be able to operate Kry Headliner to produce art copy for mechanicals and comprehensives

UNIT: LETTERING

TOPIC: VERTICAL GOTHIC LETTERING

Task	Theory	Communication Skills	Mathematics Skills	Science Knowledge	Student Outcome
I. Producing vertical gothic lettering	Single-stroke lettering method 1. Vertical 2. Inclined 3. Capitals 4. Uniformity	A. Functional reading skills 1. Informational handouts 2. Performance test B. Vocabulary 1. Vertical 2. Inclined 3. Uniformity C. Spelling 1. Vocabulary 2. Art copy D. Following directions - performance test E. Interpretation of diagrams - reference alphabets F. Test taking skills	A. Measurement - standard 1. Sheet mark up and construction 2. Whole numbers 3. Fractions B. Geometry 1. Identify geometric forms 2. Parallel lines 3. Horizontal lines 4. Vertical lines	Graphite	A. The student will be able to construct a 5" x 7" rectangle on layout bond and reproduce vertical and inclined gothic alphabets within B. The student will be able to demonstrate a knowledge of single-stroke lettering upon written examination

UNIT: LETTERING - CONTINUED

TOPIC: SPEEDBALL LETTERING SYSTEM

Task	Theory	Communication Skills	Mathematics Skills	Science Knowledge	Student Outcome
I. Utilizing Speedball pens	Speedball lettering system 1. Reference handbook 2. Styles of pens 3. Utilization of pens 4. Calligraphy	A. Functional reading skills 1. Informational handouts 2. Performance test 3. Reference handbook B. Vocabulary 1. Dip pen 2. Nib C. Spelling - Art copy D. Following directions - performance test E. Interpretation of diagrams - reference alphabet F. Test taking skills	A. Standard measurement - sheet mark up and construction B. Geometry 1. Identify geometric forms 2. Parallel lines 3. Horizontal lines	Water soluble	A. The student will be able to construct parallel lines on bristol board and reproduce two Speedball alphabets from reference B. The student will be able to identify four basic types of Speedball pens upon written examination

UNIT: LETTERING - CONTINUED

TOPIC: BUILT-UP LETTERING

Task	Theory	Communication Skills	Mathematics Skills	Science Knowledge	Student Outcome
I. Producing built-up lettering	A. Types of lettering 1. Built-up 2. Freehand or written B. Roman lettering - set of letters 1. Narrow set 2. Square set 3. Wide set 4. Thin C. Letter construction 1. Utilizing drafting tools a. compass - radius of circles b. template - diameter of circles 2. Serifs a. round b. square 3. Letter strokes - width of "I" D. Vocabulary 1. Condensed 2. Extended 3. Bold 4. Light 5. Medium	A. Functional reading skills 1. Informational handouts 2. Performance test B. Vocabulary 1. Built-up 2. Written 3. Set 4. Radius 5. Diameter 6. Serif 7. Condensed 8. Extended 9. Bold 10. Light 11. Medium C. Spelling - Art copy D. Following directions - performance test E. Test taking skills	A. Measurement - standard 1. Whole numbers 2. Fractions B. Geometry 1. Identify geometric forms 2. Radius 3. Diameter 4. Horizontal lines 5. Vertical lines 6. Parallel lines 7. Diagonal lines		A. The student will be able to produce built-up lettering of own design on bristol board B. The student will be able to demonstrate a knowledge of built-up lettering upon written examination C. The student will be able to define vocabulary upon written examination

UNIT: LETTERING - CONTINUED

TOPIC: MARKER LETTERING

Task	Theory	Communication Skills	Mathematics Skills	Science Knowledge	Student Outcome
1. Producing marker lettering	A. Markers 1. Permanent 2. Water soluble 3. Calligraphy B. Utilization	A. Functional reading skills - performance test B. Spelling - art copy C. Following directions - performance test	A. Measurement - standard 1. Whole numbers 2. Fractions B. Geometry 1. Horizontal lines 2. Vertical lines 3. Diagonal lines 4. Identify geometric shapes		The student will be able to produce a marker alphabet on constructed lines

UNIT: LETTERING - CONTINUED

TOPIC: DRY TRANSFER

Task	Theory	Communication Skills	Mathematics Skills	Science Knowledge	Student Outcome
I. Utilizing dry transfer materials	A. Definition of dry transfer B. Identification of materials 1. Letters 2. Symbols 3. Tint sheets 4. Color sheets C. Utilization of Chartpak burnisher D. Major manufacturers 1. Letraset 2. Mecanorma 3. Chartpak	A. Spelling - art copy B. Functional reading skills - Performance test	Measurement 1. Standard - utilization 2. Printer's measurement a. identification b. purchase		A. The student will be able to identify a need for utilization of dry transfer materials B. The student will be able to demonstrate a knowledge of dry transfer materials on various performance tests

UNIT: LETTERING - CONTINUED

TOPIC: BRUSH LETTERING

Task	Theory	Communication Skills	Mathematics Skills	Science Knowledge	Student Outcome
I. Producing brush lettering	A. Identification of brushes 1. Quills 2. Showcard 3. Sable B. Identification of paints 1. Poster 2. Lettering enamel 3. Bulletin colors 4. Tempera C. Vocabulary 1. Quill 2. Grey squirrel 3. Brown squirrel 4. One-shot 5. Mahlstick 6. Brush oil 7. Pounce D. Utilization of materials	A. Functional reading skills 1. Notes 2. Reference books B. Spelling - art copy C. Vocabulary 1. Identification 2. Definition D. Interpretation of diagrams - reference alphabets E. Following directions	A. Measurement - standard 1. Whole numbers 2. Fractions B. Ratio and proportion - mixing brush oil	Applied chemistry 1. Paints a. oil-based b. solvents 2. Flammables 3. Brush oil - mixture 4. Hydromarkers - water soluble 5. Stabilo pencils - water soluble	A. The student will be able to demonstrate a knowledge of sign painting brushes upon written examination B. The student will be able to produce freehand lettering utilizing a quill brush C. The student will be able to utilize flammables safely D. The student will be able to handle solvents safely

UNIT: LETTERING - CONTINUED

TOPIC: MECHANICAL LETTERING

Task	Theory	Communication Skills	Mathematics Skills	Science Knowledge	Student Outcome
I. Utilizing mechanical lettering set	A. Types of mechanical lettering sets 1. Letterguide 2. LeRoy B. Parts of system 1. Template 2. Scriber 3. Tracing pin 4. Tips a. cutting b. reservoir	A. Functional reading skills 1. Informational handouts 2. Performance test B. Vocabulary - parts of system C. Spelling - Vocabulary D. Following directions - performance test E. Test taking skills	Ratio and proportion 1. Enlargement of lettering 2. Reduction of lettering		A. The student will be able to operate letterguide lettering system B. The student will be able to produce a Letterguide alphabet and several special effects on illustration board C. The student will be able to demonstrate a knowledge of Letterguide system parts upon written examination

UNIT: PASTE-UP

TOPIC: SYMBOLS OF THE TRADE

Task	Theory	Communication Skills	Mathematics Skills	Science Knowledge	Student Outcome
1. Utilizing symbols of the trade	A. Paste-up guidelines - identification of symbols B. Vocabulary and symbols 1. Register marks 2. Trim lines 3. Gripper margin 4. Crop marks 5. Interior fold lines 6. Exterior fold lines 7. Interior cut lines 8. Exterior cut lines C. Utilization of mediums 1. Non-photo blue 2. India ink	A. Functional reading skills 1. Informational handouts 2. Performance test B. Vocabulary 1. Identification 2. Definition C. Spelling - vocabulary D. Interpretation of diagrams - informational handouts E. Following directions - performance test F. Outlining and note taking G. Test taking skills	A. Measurement - standard 1. Whole numbers 2. Fractions B. Geometry 1. Identify geometric shapes 2. Horizontal lines 3. Vertical lines	Applied chemistry - high contrast film 1. Tonal range 2. Non-photo blue	A. The student will be able to reproduce an 8½" x 11" page mark up utilizing all corresponding paste-up symbols B. The student will be able to demonstrate a knowledge of symbols upon written examination C. The student will be able to utilize corresponding symbols correctly on paste-up performance test

UNIT: PASTE-UP - CONTINUED

TOPIC: PASTE-UP THEORY

Task	Theory	Communication Skills	Mathematics Skills	Science Knowledge	Student Outcome
	A. Art for reproduction 1. Line copy 2. Continuous tone copy 3. Halftones B. Steps to a layout 1. Thumbnail sketches 2. Rough layouts 3. Comprehensive layouts 4. Mechanicals C. Image generation 1. Hot composition 2. Cold composition a. technical illustration b. clip art and pre-printed type c. strike-on d. continuous tone photography e. photocomposition - computer typesetting	A. Functional reading skills - informational handouts B. Vocabulary 1. Art for reproduction 2. Steps to a layout 3. Image generation C. Spelling - vocabulary D. Outlining and note taking E. Test taking skills		Applied chemistry 1. Molten metals for type 2. Photographic theory of type composition	The student will be able to define line copy, continuous tone copy and halftone copy upon written examination

UNIT: PASTE-UP - CONTINUED

TOPIC: WAX AND RUBBER CEMENT PASTE-UPS

Task	Theory	Communication Skills	Mathematics Skills	Science Knowledge	Student Outcome
I. Producing wax paste-ups II. Producing rubber cement paste-ups	A. Wax paste-ups 1. Preferred adhesive a. wax b. hand waxer c. page waxer 2. Utilization of drafting tools 3. Mark up of board 4. Image generation 5. Alignment of copy 6. Burnishing a. burnisher b. brayer B. Rubber cement paste-ups 1. Utilization methods 2. Utilization of drafting tools 3. Mark up of board 4. Image generation 5. Alignment of copy 6. Burnishing a. burnisher b. brayer 7. Clean-up - rubber cement pick-up	A. Functional reading skills 1. Informational handouts 2. Performance test B. Interpretation of diagrams - utilizing rough layouts C. Following directions - performance tests D. Outlining and note taking E. Problem solving F. Test taking skills	A. Measurement 1. Standard a. whole numbers b. fractions 2. Printer's measurement B. Geometry 1. Identify geometric shapes 2. Horizontal lines 3. Vertical lines C. Ratio and proportion - specifying camera instructions	Applied chemistry 1. Solvents 2. Adhesives - solvents 3. Flammables 4. Safe use of solvents	A. The student will be able to produce wax paste-ups on illustration board with corresponding symbols of the trade B. The student will be able to demonstrate a knowledge of adhesives upon written examination C. The student will be able to list two adhesives for paste-up upon written examination D. The student will be able to identify solution to assembly of items to be pasted-up within a 5" x 8" area E. The student will be able to identify and list three methods in which rubber cement can be used as an adhesive F. The student will be able to utilize a rubber cement pick-up to clean work

UNIT: INKING

TOPIC:

Task	Theory	Communication Skills	Mathematics Skills	Science Knowledge	Student Outcome
I. Producing line art illustrations	A. Line art 1. Stipple 2. Crosshatching 3. Silhouette 4. Outline B. Illustration aids 1. Opaque projector 2. Tracing paper 3. Film or slide projector 4. Pantograph 5. Camera Lucida	A. Functional reading skills 1. Informational handouts 2. Performance test B. Vocabulary 1. Line art 2. Illustration aids C. Outlining and note taking D. Spelling - vocabulary E. Test taking skills F. Following directions - performance test	Ratio and proportion 1. Enlargement 2. Reduction 3. Pantograph		A. The student will be able to produce four line art illustrations on bristol utilizing all four methods B. The student will be able to list the four line art methods upon written examination C. The student will be able to list three illustration aids upon written examination D. The student will be able to demonstrate a knowledge of line art procedures upon written examination

UNIT: SILKSCREEN

TOPIC: HAND CUT STENCILS

Task	Theory	Communication Skills	Mathematics Skills	Science Knowledge	Student Outcome
I. Performing hand cut film procedures	A. Hand cut stencils 1. Lacquer film 2. Aqua film 3. Solvents a. lacquer thinner b. water c. safe use of solvents B. Procedures 1. Cutting stencils 2. Adhering stencil 3. Masking stencil 4. Printing stencil 5. Clean up procedure - safe use of solvents	A. Functional reading skills 1. Informational handouts 2. Performance test 3. Labels B. Vocabulary 1. Aqua 2. Adhere 3. Mask C. Spelling 1. Vocabulary 2. Art copy D. Following directions - performance test E. Signal words - label precautions F. Outlining and note taking G. Test taking skills	Measurement - standard 1. Selection of screen 2. Cutting of fabric	Applied chemistry 1. Solvents a. flammability b. applications 2. Film solubility - adhering	A. The student will be able to produce a hand cut silkscreen print on textile or paper B. The student will be able to demonstrate a knowledge of hand cut film procedures upon written examination C. The student will be able to demonstrate a knowledge of solvents upon written examination D. The student will be able to list four basic types of silkscreen stencils upon written examination

UNIT: SILKSCREEN - CONTINUED

TOPIC: INDIRECT PHOTOSTENCILS

Task	Theory	Communication Skills	Mathematics Skills	Science Knowledge	Student Outcome
I. Producing indirect photostencils	A. Photographic stencils 1. Indirect - film 2. Direct - liquid emulsion 3. CDF film - combines direct and indirect characteristics 4. Water soluble B. Positives 1. Handmade 2. Autopositive film 3. Conversion of negative on line film 4. Characteristics - opaque image areas C. Procedures 1. Exposure 2. Wash-out 3. Adhering 4. Masking 5. Printing	A. Functional reading skills 1. Informational handouts 2. Performance test B. Vocabulary 1. Stencils 2. Positives C. Spelling 1. Vocabulary 2. Art copy D. Following directions - performance test E. Outlining and note taking F. Test taking skills	A. Measurement - standard 1. Preparation of art copy 2. Selection of screen 3. Cutting of fabric 4. Cutting of film B. Time - exposure of screen	Applied chemistry 1. Inks and solvents 2. Stencil compatibility 3. Film solubility - adhering 4. Photographic theory a. incandescent light b. fluorescent light c. chemical hardening of film d. wash-out	A. The student will be able to produce a one color indirect silkscreen print on fabric or paper B. The student will be able to demonstrate a knowledge of indirect stencil production procedures upon written examination C. The student will be able to demonstrate a knowledge of characteristics of positives upon written examination D. The student will be able to list three types of photographic stencils upon written examination E. The student will be able to list three types of positives upon written examination F. The student will be able to demonstrate a knowledge of photographic theory upon written examination G. The student will be able to demonstrate a knowledge of ink-solvent-stencil compatibility upon written examination

UNIT: SILKSCREEN - CONTINUED

TOPIC: DIRECT PHOTOSTENCILS

Task	Theory	Communication Skills	Mathematics Skills	Science Knowledge	Student Outcome
I. Producing direct photostencils	A. Characteristics 1. Cost factor versus indirect 2. Liquid emulsion 3. Scoop coater 4. "TZ" characteristics 5. Pinholing 6. Sawtoothing 7. Fabrics 8. Chemical sensitizer B. Rubylith color separations 1. Characteristics of masking films 2. Base sheets 3. Overlays 4. Register marks C. Procedures 1. Application a. scoop coater b. drying c. recoating 2. Exposure 3. Wash-out 4. Masking 5. Printing	A. Functional reading skills 1. Informational handouts 2. Performance test 3. Notes 4. Labels 5. Mixing instructions B. Vocabulary 1. Characteristics 2. Color separation C. Outlining and note taking D. Spelling 1. Vocabulary 2. Art copy E. Test taking skills F. Following directions - performance test	A. Measurement 1. Standard a. preparation of art copy b. selection of screen c. cutting of fabric 2. Liquid - preparation of sensitizer B. Ratio and proportion - mixing emulsion C. Time - exposure of screen	Applied chemistry 1. Inks and solvents 2. Stencil compatibility 3. Photographic theory a. incandescent light b. fluorescent light c. chemical hardening of emulsion d. wash-out 4. Characteristics of light a. undercutting of stencil b. reflectivity c. color spectrum d. dyed fabrics	A. The student will be able to produce a two color direct silkscreen print on fabric or paper B. The student will be able to demonstrate a knowledge of direct stencil production upon written examination C. The student will be able to demonstrate a knowledge of color separation procedures and vocabulary upon written examination

UNIT: SILKSCREEN - CONTINUED

TOPIC: INKS AND SOLVENTS

Task	Theory	Communication Skills	Mathematics Skills	Science Knowledge	Student Outcome
I. Using inks and solvents	A. Inks 1. Oil based a. flat enamels b. gloss enamels c. plastisols d. flock adhesives e. textile 2. Water based a. acrylic textile b. acrylic poster B. Solvents 1. Mineral spirits 2. Lacquer thinner 3. Water C. Curing 1. Evaporative 2. Thermosetting 3. Catalysts D. Applications - surfaces E. Safety 1. Flammability 2. Health hazards	A. Functional reading skills 1. Notes 2. Labels B. Vocabulary 1. Inks 2. Solvents 3. Curing C. Outlining and note taking D. Spelling - vocabulary E. Test taking skills F. Following directions 1. Applications 2. Solvents G. Signal words 1. Labels 2. Precautions H. Deductive reasoning 1. Selection of ink 2. Selection of solvent		Applied chemistry 1. Oil based inks 2. Water based inks 3. Solvents 4. Curing 5. Applications	A. The student will be able to demonstrate a knowledge of ink and solvent selection and utilization when screen printing B. The student will be able to use solvents safely C. The student will be able to identify solvents for inks upon written examination D. The student will be able to differentiate curing procedures for thermo-setting and evaporative inks

UNIT: SILKSCREEN - CONTINUED

TOPIC: FABRICS

Task	Theory	Communication Skills	Mathematics Skills	Science Knowledge	Student Outcome
I. Preparing screen fabrics	A. Types of fabric 1. Silk 2. Polyester 3. Nylon B. Mesh sizes 1. Mesh tables and application 2. Selection C. Thread characteristics 1. Multifilament 2. Monofilament 3. Dyed D. Preparation of fabric 1. Abrading 2. Degreasing	A. Functional reading skills 1. Informational handouts 2. Performance test 3. Labels B. Vocabulary 1. Fabrics 2. Characteristics 3. Preparation C. Outlining and note taking D. Spelling - vocabulary E. Test taking skills F. Following directions - performance test G. Deductive reasoning - selecting mesh	Whole numbers - mesh sizes	Applied chemistry 1. Thread characteristics 2. Abrasion 3. Degreasing 4. Dyes - reflectivity	A. The student will be able to select proper mesh size and fabric for printing applications B. The student will be able to prepare fabric by abrading and degreasing C. The student will be able to demonstrate a knowledge of fabric preparation upon written examination

UNIT: SILKSCREEN - CONTINUED

TOPIC: STRETCHING FABRICS

Task	Theory	Communication Skills	Mathematics Skills	Science Knowledge	Student Outcome
I. Utilizing tite-stretch cord method	A. Stretching fabrics 1. Tite-stretch method 2. Staple method B. Tools - cord applicators 1. Roller 2. Pressure	A. Functional reading skills 1. Informational handouts 2. Performance test B. Following directions - performance test C. Outlining and note taking D. Test taking skills	Measurement - standard 1. Fabric 2. Cord	Physics 1. Friction 2. Tension	A. The student will be able to stretch screen fabric onto frame utilizing tite-stretch cord method B. The student will be able to demonstrate a knowledge of stretching procedures and methods upon written examination

UNIT: SILKSCREEN - CONTINUED

TOPIC: SQUEEGEES

Task	Theory	Communication Skills	Mathematics Skills	Science Knowledge	Student Outcome
I. Identifying squeegees	A. Applications of silkscreen 1. Most versatile printing process 2. Surfaces B. Squeegees 1. Rounded edge 2. Square edge 3. Square with rounded edges 4. Single sided bevel 5. Double sided bevel 6. Double sided bevel with square edge C. Composition of blade 1. Urethane 2. Rubber	A. Functional reading skills 1. Informational handouts 2. Notes B. Vocabulary - squeegees C. Outlining and note taking D. Spelling - vocabulary E. Test taking skills F. Deductive reasoning - selection of squeegee	Geometry - identification of geometric shapes	Applied chemistry - blade composition (reaction to solvents)	A. The student will be able to identify proper squeegee for the ink to be used and surface to be printed B. The student will be able to demonstrate a knowledge of applications of silk-screen upon written examination C. The student will be able to demonstrate a knowledge of squeegee selection and utilization upon written examination

Task	Theory	Communication Skills	Mathematics Skills	Science Knowledge	Student Outcome
I. Performing multicolor printing II. Performing textile printing	A. Multicolor printing 1. Color separation a. separate screen for each color b. Register marks c. hinge clamps 2. Production printing a. textile 1.0 four-color printing machine 1.1 platens 1.2 spray adhesive - solvents 1.3 registration of screens 1.4 flash curing 1.5 wet-on-wet printing b. paper - register guides B. Textile printing 1. Selection of ink(s) 2. Four-color printing machine 3. Platens a. shirt b. sleeve 4. Spray adhesives - solvent 5. Selection of squeegee 6. Curing a. thermosetting inks b. evaporation inks	A. Functional reading skills 1. Informational handouts 2. Performance test B. Vocabulary 1. Color separation 2. Production printing 3. Platens 4. Adhesive 5. Thermosetting 6. Evaporation C. Outlining and note taking D. Spelling 1. Vocabulary 2. Art copy E. Test taking skills F. Following directions - performance test G. Deductive reasoning 1. Selection of ink 2. Selection of squeegee		Applied chemistry 1. Curing thermosetting inks 2. Spray adhesive solvents 3. Evaporation	A. The student will be able to produce a multicolor silkscreen print on textile or paper B. The student will be able to demonstrate a knowledge of multicolor printing procedures upon written examination C. The student will be able to utilize solvents safely D. The student will be able to produce a silkscreen print on textile E. The student will be able to demonstrate a knowledge of textile printing upon written examination

UNIT: COLOR

TOPIC:

Task	Theory	Communication Skills	Mathematics Skills	Science Knowledge	Student Outcome
I. Producing a color wheel II. Utilizing color psychology	A. Color wheel 1. Primary colors 2. Secondary colors 3. Tertiary colors 4. Analogous colors 5. Complementary colors 6. Mixing colors a. tint b. shade B. Color psychology 1. Contrast 2. Emotions 3. Message analysis - ongoing use of color	A. Functional reading skills 1. Informational handouts 2. Performance test B. Vocabulary - color terminology C. Outlining and note taking D. Spelling - vocabulary E. Test taking skills F. Following directions - performance test		Physics 1. Light 2. Analysis of spectrum	A. The student will be able to list the primary, secondary and tertiary colors upon written examination B. The student will be able to define tint and shade upon written examination C. The student will be able to define analogous and complementary colors upon written examination D. The student will be able to explain the use of color theory in message analysis upon written examination E. The student will be able to produce a color wheel on illustration board

UNIT: CARTOONING

TOPIC: FACES AND FIGURES

Task	Theory	Communication Skills	Mathematics Skills	Science Knowledge	Student Outcome
I. Drawing simple faces II. Drawing basic figures	A. Faces 1. Depicting simple emotions a. anger b. sorrow c. smiling d. fear e. surprise f. yelling 2. Constructing cartoon faces - "four easy steps" method B. Figures 1. Stick method 2. Oval method 3. Musculature 4. Cartoon clothing 5. Hands	A. Functional reading skills 1. Informational handouts 2. Performance test B. Vocabulary - cartoon terminology C. Outlining and note taking D. Spelling - vocabulary E. Test taking skills F. Following directions - performance test	A. Ratio and proportion - drawing to scale B. Measurement 1. Whole numbers 2. Fractions		A. The student will be able to depict six simple emotions utilizing the same character face B. The student will be able to utilize stick and oval method to produce three cartoon figures C. The student will be able to identify characteristics of simple emotions upon written examination

UNIT: CARTOONING - CONTINUED

TOPIC: PANELS

Task	Theory	Communication Skills	Mathematics Skills	Science Knowledge	Student Outcome
I. Producing cartoon panels	A. Multi-panel gags 1. Background 2. Set up 3. Punchline B. Single panel gags C. Developing humor D. Tint sheets	A. Functional reading skills 1. Informational handouts 2. Performance test B. Vocabulary - cartoon terminology C. Outlining and note taking D. Spelling - vocabulary E. Test taking skills F. Following directions - performance test G. Creative writing - developing humor	A. Ratio and proportion - drawing to scale B. Measurement 1. Whole numbers 2. Fractions		A. The student will be able to produce a multi-panel gag on illustration board B. The student will be able to demonstrate an understanding of multi-panel gags and single panel gags upon written examination C. The student will be able to label the order of panels in a multi-panel gag upon written examination D. The student will be able to describe how humor is developed in cartooning upon written examination

UNIT: AIRBRUSH

TOPIC: MAINTENANCE

Task	Theory	Communication Skills	Mathematics Skills	Science Knowledge	Student Outcome
I. Performing maintenance procedures	A. Airbrush theory 1. Single action 2. Double action - jar/cup adaptable 3. Atomization - paint/air mixture 4. History B. Double action nomenclature 1. Trigger 2. Needle 3. Needle chuck 4. Head 5. Spray regulator 6. Handle 7. Color cup 8. Cap/stem adaptor C. Materials 1. Acrylics 2. Gouache 3. Frisket 4. Canary board D. Maintenance 1. Cleaning procedure 2. Compressed air 3. Safety	A. Functional reading skills 1. Informational handouts 2. Performance test B. Vocabulary 1. Theory 2. Nomenclature 3. Materials C. Outlining and note taking D. Spelling - vocabulary E. Test taking skills F. Following directions - performance test		A. Physics - atomization B. Applied chemistry - acrylics - water based, dries to waterproof plastic	A. The student will be able to demonstrat knowledge of airbrush theory upon written examination B. The student will be able to demonstrate a knowledge of double action nomenclature upon written examination C. The student will be able to demonstrate a knowledge of airbrush materials upon written examination D. The student will be able to maintain cleanliness of airbrush to produce optimum results E. The student will be able to demonstrate safe usage of compressed air

UNIT: AIRBRUSH - CONTINUED

TOPIC: AIRBRUSH TECHNIQUES

Task	Theory	Communication Skills	Mathematics Skills	Science Knowledge	Student Outcome
I. Producing lettering II. Utilizing freehand techniques III. Utilizing masking techniques	A. Lettering procedures 1. Gothic 2. Script B. Freehand procedures 1. Holding the airbrush 2. Triggering C. Masking 1. Frisket - cutting 2. Canary board 3. Spray adhesives	A. Vocabulary - airbrush terminology B. Spelling 1. Vocabulary 2. Content C. Following directions - demonstrated techniques D. Test taking skills			A. The student will be able to produce gothic lettering utilizing a double action airbrush B. The student will be able to hold an airbrush correctly C. The student will be able to utilize airbrush trigger to control paint and air flow D. The student will be able to utilize masking materials to produce representational artwork E. The student will be able to demonstrate a knowledge of freehand and masking techniques upon written examination

UNIT: COMPUTER

TOPIC: PC BASED PUBLISHING

Task	Theory	Communication Skills	Mathematics Skills	Science Knowledge	Student Outcome
I. Operating the IBM Compatible Computer II. Utilizing printers	A. Computers in commercial art and printing 1. Word processing 2. Desktop publishing 3. Paint programs 4. Computer typesetting B. Hardware 1. CPU a. IBM standards b. Apple 2. Monitor a. standards 1.0 Hercules 1.1 CGA 1.2 EGA 1.3 VGA 1.4 high resolution b. WYSIWYG 1.0 screen fonts 1.1 printer fonts 3. Information storage a. floppy disc drive b. hard drive 4. Mouse 5. Scanner 6. Laser printer a. HP standards b. postscript standards 7. Dot matrix printer C. Operating systems and interfaces 1. MS-DOS a. root directory b. sub-directories 2. GEM 3. Windows D. Typesetting interfaces 1. Translators 2. Raster image processors (RIP)	A. Functional reading skills 1. Information handouts 2. Performance test 3. Keyboard B. Vocabulary - computer terminology C. Outlining and note taking D. Spelling - vocabulary E. Test taking skills F. Following directions 1. Instruction manual 2. Performance test		Physics 1. Electricity a. silicon chips b. cathode ray tube 2. Magnetism - magnetic storage 3. Lasers	A. The student will be able to list four areas in which computers have affected art upon written examination B. The student will be able to identify computer peripherals upon written examination C. The student will be able to discuss the impact of electronic and desktop publishing on commercial art and printing upon written examination D. The student will be able to locate and utilize directories within the basic disk operating system

0(12

UNIT: COMPUTER - CONTINUED

TOPIC: PAGE DESIGN SOFTWARE

Task	Theory	Communication Skills	Mathematics Skills	Science Knowledge	Student Outcome
I. Utilizing page design software	A. Software 1. Page design formats a. GEM b. Windows 2. Page design programs a. Ventura Publisher b. Pagemaker B. Output 1. Laser printer 2. Dot matrix printer 3. Disk a. file b. "print to" file 4. Encapsulated postscript (EPS) a. postscript printers (paper) b. raster image processors (photo)	A. Functional reading skills 1. Instruction manual 2. Keyboard B. Vocabulary - PC Publishing and terminology C. Outlining and note taking D. Spelling 1. Vocabulary 2. Content E. Test taking skills F. Following directions 1. Instruction manual 2. Performance test			A. The student will be able to operate Ventura Publisher or Pagemaker B. The student will be able to import graphic file formats into page design programs C. The student will be able to produce laser printed copy from page design programs D. The student will be able to create text on a word processor and import into page design programs E. The student will be able to demonstrate a knowledge of PC based page design procedures upon written examination

UNIT: COMPUTER - CONTINUED

TOPIC: GRAPHICS SOFTWARE

Task	Theory	Communication Skills	Mathematics Skills	Science Knowledge	Student Outcome
I. Utilizing graphics software	A. Software 1. Floppy disk 2. Hard drives B. Graphic software 1. Paint programs 2. Vector based programs C. Software functions 1. Menu a. brushes b. pallette c. draw d. fill e. special functions 2. Save to disk D. Graphics file formats 1. .TIFF 2. .PCX E. Scanners 1. Sheet fed 2. Flat bed a. graphics b. text 1.0 optical recognition 1.1 trainability	A. Functional reading skills 1. Instructional manual 2. Menu B. Vocabulary - software functions C. Spelling - vocabulary D. Following directions - instruction manual			A. The student will be able to load and run disk-based software B. The student will be able to produce black and white graphics utilizing PC Paintbrush program C. The student will be able to produce color computer graphics utilizing PC Paintbrush D. The student will be able to save graphics on floppy disk E. The student will be able to operate scanner F. The student will be able to modify scanned images utilizing software

125

UNIT: PHOTOGRAPHY

TOPIC: 35MM SINGLE LENS REFLEX CAMERA

Task	Theory	Communication Skills	Mathematics Skills	Science Knowledge	Student Outcome
I. Operating a 35mm single lens reflex camera	A. Single lens reflex 1. Mirror principle 2. Interchangeable lenses 3. Film cassettes B. Parts of camera 1. Nomenclature - basic operating parts and their function 2. Terminology - related terms and accessories C. Exposure 1. Film speed a. ASA b. DIN c. ISO 2. Shutter speed 3. Aperture a. F-stops b. Depth of field 4. Focus 5. Loading film - film advance 6. Retrieval - film rewind D. Film composition - emulsion (silver halides) E. Photo composition 1. Composing better pictures 2. Cropping	A. Functional reading skills 1. Informational handouts 2. Performance test B. Vocabulary 1. Nomenclature 2. Terminology C. Outlining and note taking D. Spelling - vocabulary E. Test taking skills F. Following directions 1. Performance test 2. Operations sequence G. Deductive reasoning - exposure sequence		A. Physics - light B. Applied chemistry - photographic emulsion 1. Silver halides 2. Latent image	A. The student will be able to demonstrate a knowledge of nomenclature by labeling camera parts upon written examination B. The student will be able to demonstrate a knowledge of terminology upon written examination C. The student will be able to demonstrate a knowledge of exposure upon written examination D. The student will be able to load a 35mm single lens reflex camera E. The student will be able to operate a 35mm single lens reflex camera sufficiently to produce usable images on film

UNIT: PHOTOGRAPHY - CONTINUED

TOPIC: ROLL FILM

Task	Theory	Communication Skills	Mathematics Skills	Science Knowledge	Student Outcome
I. Processing roll film	A. Developing tanks 1. Capacity 2. Reels B. Chemistry 1. Developer 2. Stop bath 3. Fixer 4. Rinse 5. Photo-flo C. Procedures 1. Opening cassette 2. Loading reel 3. Timing solutions 4. Presentation of negatives D. Safety - chemical handling procedures	A. Functional reading skills 1. Informational handouts 2. Performance test 3. Charts 4. Reference tables 5. Labels 6. Solution instructions 7. Safety information B. Vocabulary - chemistry C. Outlining and note taking D. Spelling - vocabulary E. Test taking skills F. Following directions 1. Performance test 2. Procedures 3. Chemistry	A. Ratio and proportion - chemical mixing B. Measurement 1. Liquid 2. Dry	A. Applied chemistry 1. Action of developer 2. Action of stop bath - acids 3. Action of fixer B. Physics - light (photoconversion of halide crystals in emulsion)	A. The student will be able to demonstrate a knowledge of roll film processing upon written examination B. The student will be able to demonstrate safe handling of chemicals C. The student will be able to process a roll of Kodak Tri-X Pan black and white film

UNIT: PHOTOGRAPHY - CONTINUED

TOPIC: CONTACT PRINTING

Task	Theory	Communication Skills	Mathematics Skills	Science Knowledge	Student Outcome
I. Performing contact printing procedures	A. Contact printing 1. Contact prints 2. Photograms B. Orientation to enlarger - seven basic parts C. Chemical preparation 1. Four processing baths a. developer (Dektol) b. stop bath c. fixer d. running water 2. Temperature D. Papers 1. Standard 2. Resin coated E. Exposure 1. Aperture 2. Timer 3. Safelights 4. Contact printer F. Production 1. Procedure 2. Print drying a. standard b. resin coated	A. Functional reading skills 1. Informational handouts 2. Performance test 3. Labels B. Vocabulary 1. Enlarger parts 2. Chemicals C. Outlining and note taking D. Spelling - vocabulary E. Test taking skills F. Following directions - 1. Performance test 2. Procedures 3. Chemistry	A. Ratio and proportion - chemical mixing B. Measurement 1. Liquid 2. Dry	A. Applied chemistry 1. Action of developer 2. Action of stop bath - acids 3. Action of fixer B. Physics - light (photoconversion of paper emulsion)	A. The student will be able to produce a contact print of negatives on RC paper B. The student will be able to produce a photogram on RC paper C. The student will be able to demonstrate a knowledge of contact printing procedures upon written examination D. The student will be able to demonstrate a knowledge of paper chemistry upon written examination E. The student will be able to label parts of enlarger upon written examination F. The student will be able to define a photogram upon written examination

UNIT: PHOTOGRAPHY - CONTINUED

TOPIC: PROJECTION PRINTING

Task	Theory	Communication Skills	Mathematics Skills	Science Knowledge	Student Outcome
I. Producing projection prints	A. Enlarger B. Chemical preparation C. Papers D. Exposure 1. Projection print scale 2. Test strip E. Contrast - filters F. Composition - cropping	A. Functional reading skills 1. Informational handouts 2. Performance test 3. Labels B. Vocabulary - exposure C. Outlining and note taking D. Spelling - vocabulary E. Test taking skills F. Following directions 1. Performance test 2. Procedures 3. Chemistry	A. Ratio and proportion - chemical mixing B. Measurement 1. Liquid 2. Dry	A. Applied chemistry 1. Action of developer 2. Action of stop bath - acids 3. Action of fixer B. Physics - light (photoconversion of paper emulsion)	A. The student will be able to produce a projection print from a 35mm negative on RC paper B. The student will be able to demonstrate a knowledge of projection printing upon written examination C. The student will be able to define projection print scale upon written examination D. The student will be able to utilize projection print scale to produce projection prints

UNIT: PHOTOGRAPHY - CONTINUED

TOPIC: PHOTOGRAPH MOUNTING

Task	Theory	Communication Skills	Mathematics Skills	Science Knowledge	Student Outcome
I. Dry mounting photographs	A. Print presentation 1. Reproduction photography 2. Art photography B. Dry mount tissue 1. Standard papers 2. Resin coated papers C. Tools 1. Tacking iron 2. Dry mount press 3. Drafting tools 4. X-acto knife and mat cutter D. Procedure 1. Measuring board 2. Cutting board 3. Tacking tissue 4. Trimming print 5. Tacking print 6. Mounting print	A. Functional reading skills 1. Informational handouts 2. Performance test 3. Instruction sheet B. Vocabulary 1. Dry mount tissue 2. Tools C. Outlining and note taking D. Spelling - vocabulary E. Test taking skills F. Following directions	Measurement - standard 1. Whole numbers 2. Fractions	Physics - heat (thermo-setting adhesives)	A. The student will be able to dry mount a RC print onto hot press illustration board B. The student will be able to demonstrate a knowledge of dry mounting procedures upon written examination

UNIT: PHOTOGRAPHY - CONTINUED

TOPIC: SLIDE GRAPHICS

Task	Theory	Communication Skills	Mathematics Skills	Science Knowledge	Student Outcome
I. Producing slide graphics (35mm format)	A. Media production 1. Storyboard 2. Content (script) 3. Graphics B. Production of slide graphics 1. Posterboard 2. Dry transfer lettering C. Tools 1. Burnisher 2. Tripod 3. Camera 4. Lights 5. Lenses 6. Filters D. Bracketing 1. Overexposure 2. Underexposure E. Mounting slides 1. Snap mount 2. Thermal mount	A. Functional reading skills 1. Informational handouts 2. Performance test B. Vocabulary 1. Media production 2. Bracketing C. Outlining and note taking D. Spelling 1. Vocabulary 2. Content (slide graphics) E. Test taking skills F. Following directions - performance test		Physics - light (incandescent) 1. Effects on daylight film 2. Filters	A. The student will be able to produce slide graphics on 35mm Ektachrome 400 film B. The student will be able to produce artwork utilizing dry transfer type C. The student will be able to demonstrate a knowledge of graphics production upon written examination

UNIT: STAT CAMERA

TOPIC:

Task	Theory	Communication Skills	Mathematics Skills	Science Knowledge	Student Outcome
I. Producing line shots II. Producing autopositives III. Producing special effects	A. Line photography 1. Process camera 2. Stat camera 3. Line copy 4. Continuous tone photography and copy 5. Halftone a. screen sizes b. special effect screens B. Itek 430 stat camera 1. Copy board 2. Size and focus controls 3. Aperture 4. Material size C. Materials 1. Developer 2. Fixer 3. Wash 4. Autopositive film 5. Positive paper 6. Negative film 7. Negative paper D. Vocabulary 1. Stat 2. Velox 3. Line conversion 4. Halftone 5. Line copy 6. Continuous tone	A. Functional reading skills 1. Informational handouts 2. Performance test 3. Labels and scales B. Vocabulary C. Outlining and note taking D. Spelling - vocabulary E. Test taking skills F. Following directions 1. Performance test 2. Procedure	A. Ratio and proportion 1. Scaling artwork 2. Percentage of reproduction B. Measurement - standard 1. Whole numbers 2. Fractions	Applied chemistry 1. Developer 2. Fixer	A. The student will be able to produce line shots using Itek 430 stat camera B. The student will be able to produce film positives using Itek 430 stat camera C. The student will be able to produce special effects on positive paper using Itek 430 stat camera D. The student will be able to define related vocabulary terms upon written examination E. The student will be able to demonstrate a knowledge of Itek 430 operating procedures upon written examination

UNIT: ART CAREERS

TOPIC:

Task	Theory	Communication Skills	Mathematics Skills	Science Knowledge	Student Outcome
I. Identifying career options II. Assembling a portfolio III. Resume writing	A. Career options 1. Graphic art careers a. filmstrips b. discussion of career options c. guest speakers (when available) 2. Art schools a. college b. technical schools 3. Cooperative Industrial Education (C.I.E.) 4. Freelancing B. Portfolios 1. Assembly 2. Presentation C. Resumes 1. Construction and design 2. Updating 3. Copies	A. Vocabulary - careers B. Spelling 1. Vocabulary 2. Contents of resume C. Outlining and note taking D. Oral communications E. Test taking skills			A. The student will be able to list three art related occupations upon written examination B. The student will be able to produce a portfolio containing all commercial art projects C. The student will be able to produce a typewritten resume containing any information pertinent to securing employment